CONTAINS NO CBI

EPA

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EPA-OTS

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Comprehensive Assessment Information Rule

REPORTING FORM

When completed, send this form to:	For Agency Use Only:
Document Processing Center Office of Toxic Substances, TS-790 U.S. Environmental Protection Agency 401 M Street, SW Washington, DC 20460 Attention: CAIR Reporting Office	Date of Receipt: _____ Document Control Number: _____ Docket Number: _____

EPA Form 7710-52

SECTION 1 GENERAL MANUFACTURER, IMPORTER, AND PROCESSOR INFORMATION

PART A GENERAL REPORTING INFORMATION

1.01 This Comprehensive Assessment Information Rule (CAIR) Reporting Form has been completed in response to the Federal Register Notice of..... [1][2] [2][2] [8][8]
mo. day year

CBI

[ ] a. If a Chemical Abstracts Service Number (CAS No.) is provided in the Federal Register, list the CAS No. ..... [ ][2][6][4][7][7]-[6][2]-[5]

b. If a chemical substance CAS No. is not provided in the Federal Register, list either (i) the chemical name, (ii) the mixture name, or (iii) the trade name of the chemical substance as provided in the Federal Register.

(i) Chemical name as listed in the rule ..... _____

(ii) Name of mixture as listed in the rule .... _____

(iii) Trade name as listed in the rule ..... _____

c. If a chemical category is provided in the Federal Register, report the name of the category as listed in the rule, the chemical substance CAS No. you are reporting on which falls under the listed category, and the chemical name of the substance you are reporting on which falls under the listed category.

Name of category as listed in the rule ..... _____

CAS No. of chemical substance ..... [ ][ ][ ][ ][ ][ ]-[ ][ ]-[ ]

Name of chemical substance ..... _____

1.02 Identify your reporting status under CAIR by circling the appropriate response(s).

CBI

Manufacturer 1

[ ] Importer 2

Processor ..... (3)

X/P manufacturer reporting for customer who is a processor 4

X/P processor reporting for customer who is a processor 5

[ ] Mark (X) this box if you attach a continuation sheet.

1.03 Does the substance you are reporting on have an "x/p" designation associated with it in the above-listed Federal Register Notice?

CBI

[ ]

Yes ..... [X] Go to question 1.04

No ..... [ ] Go to question 1.05

1.04 a. Do you manufacture, import, or process the listed substance and distribute it under a trade name(s) different than that listed in the Federal Register Notice? Circle the appropriate response.

CBI

[ ]

Yes 1

No ..... (2)

b. Check the appropriate box below:

[ ] You have chosen to notify your customers of their reporting obligations

Provide the trade name(s) .... _____

_____

[ ] You have chosen to report for your customers

[ ] You have submitted the trade name(s) to EPA one day after the effective date of the rule in the Federal Register Notice under which you are reporting.

1.05 If you buy a trade name product and are reporting because you were notified of your reporting requirements by your trade name supplier, provide that trade name.

CBI

[ ]

Trade name ..... ANDUR, ADIPRENE

Is the trade name product a mixture? Circle the appropriate response.

Yes ..... (1)

No 2

1.06 Certification -- The person who is responsible for the completion of this form must sign the certification statement below:

CBI

[ ]

"I hereby certify that, to the best of my knowledge and belief, all information entered on this form is complete and accurate."

A. Ronald Hetrick	A. Ronald Hetrick	6-29-89
NAME	SIGNATURE	DATE SIGNED

V. P. Development	(717) 665 - 2421
TITLE	TELEPHONE NO.

[ ] Mark (X) this box if you attach a continuation sheet.

PART B CORPORATE DATA

1.09 Facility Identification

CBI Name [F][E][N][N][E][R][ ][M][A][N][H][E][I][M][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

[ ] Address [3][1][1][ ][W][ ][S][T][A][T][E][ ][S][T][ ][ ][ ][ ][ ][ ][ ][ ]
Street

[M][A][N][H][E][I][M][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
City

[P][A] [1][7][5][4][5]--[ ][ ][ ][ ]
State Zip

Dun & Bradstreet Number .....[0][5]-[2][5][4]-[2][6][6][9]

EPA ID Number .....PAD...[0][5][2][5][4][2][6][6][9]

Employer ID Number .....O[6][0][8][6][6][0][9][1]

Primary Standard Industrial Classification (SIC) Code .....[3][0][4][1]

Other SIC Code .....[ ][ ][ ][ ]

Other SIC Code .....[ ][ ][ ][ ]

1.10 Company Headquarters Identification

CBI Name [F][E][N][N][E][R][ ][A][M][E][R][I][C][A][ ][I][N][C][ ][ ][ ][ ][ ][ ][ ]

[ ] Address [3][1][1][ ][W][ ][S][T][A][T][E][ ][S][T][ ][ ][ ][ ][ ][ ][ ][ ]
Street

[M][A][N][H][E][I][M][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
City

[P][A] [1][7][5][4][5]--[ ][ ][ ][ ]
State Zip

Dun & Bradstreet Number .....[0][5]-[2][5][4]-[2][6][6][9]

Employer ID Number .....3.[6][2][6][4][6][3][3][2]

[ ] Mark (X) this box if you attach a continuation sheet.

1.11 Parent Company Identification

CBI Name [J][H][E][N][E][R]

[ ] Address [H][U][L][L][E][N][S][L][A][N][D]
Street

[ ]
City

[ ] [ ]
State Zip

Dun & Bradstreet Number .....[ ][ ]-[ ][ ][ ]-[ ][ ][ ][ ]

1.12 Technical Contact

CBI Name [A][R][T][H][E][T][R][I][C][H]

[ ] Title [V][P][R][E][S][E][A][R][C][H][&][D][E][V][E][L][O][P][M][E][N][T]

Address [3][0][1][W][3][T][I][E][6][E][L][S][T]
Street

[M][A][N][H][E][I][M]
City

[P][A] [1][7][5][4][5]
State Zip

Telephone Number .....[7][1][7]-[6][6][5]-[2][4][2][1]

1.13 This reporting year is from ..... [0][9] [8][7] to [0][8] [8][8]
Mo. Year Mo. Year

[ ] Mark (X) this box if you attach a continuation sheet.

1.16 For each classification listed below, state the quantity of the listed substance that was manufactured, imported, or processed at your facility during the reporting year.

CBI
[__]

Classification	Quantity (kg/yr)
Manufactured	
Imported	
Processed (include quantity repackaged)	
Of that quantity manufactured or imported, report that quantity:	
In storage at the beginning of the reporting year	
For on-site use or processing	
For direct commercial distribution (including export)	
In storage at the end of the reporting year	
Of that quantity processed, report that quantity:	
In storage at the beginning of the reporting year	
Processed as a reactant (chemical producer)	
Processed as a formulation component (mixture producer)	
Processed as an article component (article producer)	52,000
Repackaged (including export)	
In storage at the end of the reporting year	

[__] Mark (X) this box if you attach a continuation sheet.

2.04 State the quantity of the listed substance that your facility manufactured, imported, or processed during the 3 corporate fiscal years preceding the reporting year in descending order.

CBI

[ ] Year ending ..... [ ][2] [8][6]
Mo. Year

Quantity manufactured ..... _____ kg

Quantity imported ..... _____ kg

Quantity processed ..... 48,000 kg

Year ending ..... [ ][2] [8][7]
Mo. Year

Quantity manufactured ..... _____ kg

Quantity imported ..... _____ kg

Quantity processed ..... 50,000 kg

Year ending ..... [ ][2] [8][8]
Mo. Year

Quantity manufactured ..... _____ kg

Quantity imported ..... _____ kg

Quantity processed ..... 52,000 kg

2.05 Specify the manner in which you manufactured the listed substance. Circle all appropriate process types.

CBI

[ ]

Continuous process 1

Semicontinuous process 2

Batch process 3

N/A

[ ] Mark (X) this box if you attach a continuation sheet.

2.06 Specify the manner in which you processed the listed substance. Circle all appropriate process types.

CBI

[ ]

Continuous process 1

Semicontinuous process 2

Batch process ..... (3)

2.07 State your facility's name-plate capacity for manufacturing or processing the listed substance. (If you are a batch manufacturer or batch processor, do not answer this question.)

CBI

[ ]

NA

Manufacturing capacity ..... _____ kg/yr

Processing capacity ..... _____ kg/yr

2.08 If you intend to increase or decrease the quantity of the listed substance manufactured, imported, or processed at any time after your current corporate fiscal year, estimate the increase or decrease based upon the reporting year's production volume.

CBI

[ ]

	Manufacturing Quantity (kg)	Importing Quantity (kg)	Processing Quantity (kg)
Amount of increase			23,000
Amount of decrease			

[ ] Mark (X) this box if you attach a continuation sheet.

2.09 For the three largest volume manufacturing or processing process types involving the listed substance, specify the number of days you manufactured or processed the listed substance during the reporting year. Also specify the average number of hours per day each process type was operated. (If only one or two operations are involved, list those.)

CBI

[ ]

	Days/Year	Average Hours/Day
Process Type #1 (The process type involving the largest quantity of the listed substance.)		
Manufactured		
Processed	200	20
Process Type #2 (The process type involving the 2nd largest quantity of the listed substance.)		
Manufactured		
Processed	200	20
Process Type #3 (The process type involving the 3rd largest quantity of the listed substance.)		
Manufactured		
Processed		

2.10 State the maximum daily inventory and average monthly inventory of the listed substance that was stored on-site during the reporting year in the form of a bulk chemical.

CBI

[ ] NA

Maximum daily inventory ..... _____ kg

Average monthly inventory ..... _____ kg

[ ] Mark (X) this box if you attach a continuation sheet.

2.12 Existing Product Types -- List all existing product types which you manufactured, imported, or processed using the listed substance during the reporting year. List the quantity of listed substance you use for each product type as a percentage of the total volume of listed substance used during the reporting year. Also list the CBI quantity of listed substance used captively on-site as a percentage of the value [ ] listed under column b., and the types of end-users for each product type. (Refer to the instructions for further explanation and an example.)

a. Product Types[1]	b. % of Quantity Manufactured, Imported, or Processed	c. % of Quantity Used Captively On-Site	d. Type of End-Users[2]
L	100	0	I

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/Sensitizer
D = Inhibitor/Stabilizer/Scavenger/Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additives
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additives
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

2.13 Expected Product Types -- Identify all product types which you expect to manufacture, import, or process using the listed substance at any time after your current corporate fiscal year. For each use, specify the quantity you expect to manufacture, import, or process for each use as a percentage of the total volume of listed substance used during the reporting year. Also list the quantity of listed substance used captively on-site as a percentage of the value listed under column b., and the types of end-users for each product type. (Refer to the instructions for further explanation and an example.)

CBI

[ ]

a. Product Types[1]	b. % of Quantity Manufactured, Imported, or Processed	c. % of Quantity Used Captively On-Site	d. Type of End-Users[2]
L	100	0	I

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/Sensitizer
D = Inhibitor/Stabilizer/Scavenger/Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additives
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additives
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 3 PROCESSOR RAW MATERIAL IDENTIFICATION

PART A GENERAL DATA

3.01 Specify the quantity purchased and the average price paid for the listed substance for each major source of supply listed. Product trades are treated as purchases.
CBI The average price is the market value of the product that was traded for the listed substance.
[ ]

Source of Supply	Quantity (kg)	Average Price ($/kg)
The listed substance was manufactured on-site.		
The listed substance was transferred from a different company site.		
The listed substance was purchased directly from a manufacturer or importer.	52,000	4.83
The listed substance was purchased from a distributor or repackager.		
The listed substance was purchased from a mixture producer.		

3.02 Circle all applicable modes of transportation used to deliver the listed substance to
CBI your facility.
[ ]

Truck ..... (1)
Railcar 2
Barge, Vessel 3
Pipeline 4
Plane 5
Other (specify) _____ 6

[ ] Mark (X) this box if you attach a continuation sheet.

3.03 CBI a. Circle all applicable containers used to transport the listed substance to your facility.

[ ]

Bags 1

Boxes 2

Free standing tank cylinders 3

Tank rail cars 4

Hopper cars 5

Tank trucks 6

Hopper trucks 7

Drums ..... (8)

Pipeline 9

Other (specify) _____ 10

b. If the listed substance is transported in pressurized tank cylinders, tank rail cars, or tank trucks, state the pressure of the tanks.

Tank cylinders ..... _____ mmHg

Tank rail cars ..... _____ mmHg

Tank trucks ..... _____ mmHg

[ ] Mark (X) this box if you attach a continuation sheet.

PART C RAW MATERIAL VOLUME

3.05 CBI [ ] State the quantity of the listed substance used as a raw material during the reporting year in the form of a class I chemical, class II chemical, or polymer, and the percent composition, by weight, of the listed substance.

	Quantity Used (kg/yr)	% Composition by Weight of Listed Substance in Raw Material (specify ± % precision)
Class I chemical	52,000	1.1 ± 15 E
Class II chemical		
Polymer		

E = Engineering Estimate

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 4 PHYSICAL/CHEMICAL PROPERTIES

General Instructions:

If you are reporting on a mixture as defined in the glossary, reply to questions in Section 4 that are inappropriate to mixtures by stating "NA -- mixture."

For questions 4.06-4.15, if you possess any hazard warning statement, label, MSDS, or other notice that addresses the information requested, you may submit a copy or reasonable facsimile in lieu of answering those questions which it addresses.

PART A PHYSICAL/CHEMICAL DATA SUMMARY

4.01 Specify the percent purity for the three major[1] technical grade(s) of the listed substance as it is manufactured, imported, or processed. Measure the purity of the substance in the final product form for manufacturing activities, at the time you import the substance, or at the point you begin to process the substance.

CBI

[ ]

N A

	Manufacture	Import	Process
Technical grade #1	_____% purity	_____% purity	_____% purity
Technical grade #2	_____% purity	_____% purity	_____% purity
Technical grade #3	_____% purity	_____% purity	_____% purity

[1]Major = Greatest quantity of listed substance manufactured, imported or processed.

4.02 Submit your most recently updated Material Safety Data Sheet (MSDS) for the listed substance, and for every formulation containing the listed substance. If you possess an MSDS that you developed and an MSDS developed by a different source, submit your version. Indicate whether at least one MSDS has been submitted by circling the appropriate response.

Yes ..... (1)

No 2

Indicate whether the MSDS was developed by your company or by a different source.

Your company 1

Another source ..... (2)

[ ] Mark (X) this box if you attach a continuation sheet.

Anderson Development Company

Material Safety Data Sheet

Product Common Name: Andur

Effective Date: November 15, 1985

HAZARD RATING	
4=EXTREME	FIRE: 1
3=HIGH	REACTIVITY: 1
2=MODERATE	TOXICITY: 2
1=SLIGHT	SPECIAL: -W-
0=INSIGNIFICANT	
•=SEE SECTION IV	

TRANSPORTATION EMERGENCY: CALL CHEMTREC
TELEPHONE NUMBER: (800) 424-9300

ANDERSON DEVELOPMENT EMERGENCY
TELEPHONE NUMBER: (517) 263-2121

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (THE HAZARD COMMUNICATION STD.)

SECTION I IDENTIFICATION

PRODUCT NAME:	Andur Prepolymer (-AP, -DP, AL-, -AS/Part A Designations)		
CHEMICAL NAME:	Isocyanate Terminated Prepolymer	CHEMICAL FAMILY:	Diisocyanate
FORMULA:	Polymeric	T.S.C.A. STATUS:	Yes 1980
SYNONYMS:	Aromatic and Aliphatic Diisocyanates		
DEPARTMENT OF TRANSPORTATION	HAZARD CLASSIFICATION	Not Regulated	
	SHIPPING NAME	Plastic Material Liquid, NOI	
CAS # Not Applicable	CAS NAME	This MSDS Represents Various Diisocyanates	

SECTION II HAZARDOUS COMPONENTS

MATERIAL	%	TLV (Units)	HAZARD
Isocyanate Monomer	<3	0.02 ppm	Highly Toxic Vapors

SECTION III PHYSICAL DATA

Melting point	Not Known	Specific Gravity (H_2O = 1)	1.07 ±0.05
Boiling point	Above 450°F	Solubility in H_2O, % by WT	Reacts
Vapor pressure	0.0003 @20°C	% Volatiles by Volume	<2
Vapor Density (Air - 1)	6	Evaporation rate (butyl acetate = 1)	0 - Reacts Air Humidity
Room temperature: appearance & state	Light Yellow Liquid	pH (as is)	Not Applicable
Odor	Slight Isocyanate	pH (1% solution)	Not Applicable

MSDS # 0003

SECTION IV FIRE AND EXPLOSION DATA

Flash point 325°F (COC)	Flammable Limits (air)	Upper	Not Known
Autoignition temp. Not Known		Lower	Not Known
Extinguishing media XX Water XX Water Fog XX CO_2 XX Dry Chemical ☐ Other_____			
Special fire fighting procedures: Highly toxic gases. Wear self-contained breathing apparatus.			
Degree of fire and explosion hazard: Slight chance of initiating fire. High risk fire fighting. Close containers may explode from extreme heat or water contamination.			
XX Stable ☐ Unstable	Hazardous Polymerization	☐ May Occur	XX Will Not Occur
Conditions to Avoid: High temperatures.			
Major contaminates that may contribute to instability: See Incompatibility.			
Incompatibility: Water, Alcohols, Amines, Alkali, Metal Compounds, Surfactants			
Hazardous decomposition products: Traces of Hydrogen Cyanide, Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides, Monomeric Isocyanate			

SECTION V SPECIAL PROTECTION

Ventilation requirements	Local to maintain vapor conc. below TLV.
Recommended personal protective equipment:	See specifics below.
Respiratory (Specify conditions)	Normal Conc.: Canister (organic). High Conc.: Self-Contained (air).
Eyes	Safety Glasses. Contact lenses should not be worn.
Gloves	Chemical resistant rubber or plastic.
Special clothing and equipment	Safety showers, eye-wash.

SECTION VI SPILL CONTROL

Procedure for release or spill: Evacuate non-essential personnel (toxic vapors). Ventilate area and cover spill with absorbent. Decontaminate with a dilute base. Collect material in open containers and treat with additional base.
Waste disposal method In accordance with Federal, State and Local Regulations. Prior to disposal, decontaminate empty containers due to product residue.
Neutralizing chemicals: Dilute base preferably a solution of 10% ammonium hydroxide in water.

SECTION VII HEALTH EFFECTS DATA

TLV AND SOURCE:	Occupational exposure to diisocyanates. TLV = 0.02 ppm; TWA = 5 ppm; SAX 6 Ed.
ACUTE EFFECTS OF OVEREXPOSURE	
SWALLOWING	Monomeric isocyanate. Oral Rat-LD_{50}: 5800 mg/kg.
SKIN ABSORPTION	Allergic Dermatitis including rash, itching, hives and swelling.
INHALATION	Monomeric isocyanate injurious to lungs and pulmonary edema may occur.
SKIN CONTACT	Irritation and itching.
EYE CONTACT	Monomer isocyanate eye rbt 100 mg. Severe damage. Watering of eyes.
CHRONIC EFFECTS OF OVEREXPOSURE	Extreme sensitivity may result.
OTHER HEALTH HAZARDS	Allergic reaction in some individuals.
EMERGENCY AND FIRST AID PROCEDURES:	
SWALLOWING	See Physician Immediately.
SKIN	Remove contaminated clothing. Wash affected area with soap and water.
INHALATION	Move from area of exposure. Administer oxygen.
EYES	Eyewash flush - see Physician.

PREPARED BY: J. R. Huerta
Environmental Manager

UNIROYAL CHEMICAL Co.
World Headquarters
Middlebury, Connecticut 06749
UNIROYAL Emergency Phone 203/723-3670
CHEMTREC Transportation Emergency Phone: 800/424-9300

MATERIAL SAFETY DATA SHEET

I. IDENTIFICATION

Trade Name: ADIPRENE®*

Chemical Name(s): Reaction product of a polyether with toluene diisocyanate (TDI)

*Applicable to L-42,L-83,L-100,L-167, L-200,L-213,L-300,L-315,L-367,L-700, L-767 and AP-R-882

CAS Number: NA

Chemical Family: Polyurethane

DOT Ident. No.: NA

DOT Hazard Class: NA

DOT Proper Shipping Name: NA

II. PHYSICAL DATA

Appearance: Honey-colored liquid

Odor: Slight

Solubility

Water: Reacts with water

Other: Soluble in THF, DMF or methylene chloride

pH: NA

Other Data:

Melting Point: NA

Boiling Point: NA

Specific Gravity (H_2O = 1): 1.03-1.15

Vapor Pressure @ 20° C: ND

Vapor Density (Air = 1): ND

Volatility @ 70° F: Low

III. FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 177°C(350°F) CC

Autoignition Temp: ND

Extinguishing Media: Water spray, CO_2 or dry chemical

Flammable Limits in Air: ND

Special Fire Fighting Procedures: Protect against inhalation of cyanate vapors & other decomposition/combustion products.

Unusual Hazards: None

IV. REACTIVITY DATA

Stability: Stable at ambient temperatures and pressures.

Incompatibility: Avoid contamination with water, strong oxidizers, alcohol or amines.

Decomposition Products: High temperatures will release cyanates & hydrocarbons. Under burning conditions - oxides of carbon & nitrogen, small amounts of HCN.

SPECIAL PROTECTION INFORMATION

Engineering Controls: Local exhaust ventilation strongly recommended. Product contains residual TDI which has an OSHA limit of 0.02 ppm under 29 CFR 1910.1000. ACGIH, TLV: 0.005 ppm.

Personal Protection Equipment: Impervious gloves & goggles should be worn. Avoid all contact with eyes, skin & clothing. Avoid breathing vapors. In the absence of good ventilation, under emergency situations or for high concentrations, self-contained or air-supplied respiratory protection is recommended.

VI. STORAGE, SPILLS, AND DISPOSAL INFORMATION

Storage: Store away from sources of direct heat and moisture. Seal containers with a dry nitrogen blanket and keep closed when not in use. Moisture contamination will evolve CO_2 and create pressure in closed systems.

Spills: Absorb on inert material. Transfer to open containers outside or in well-ventilated area. Soak with dilute ammonia hydroxide or water-alcohol mixture. Allow time for reaction to be complete before disposal.

Disposal: In accordance with any local, state and federal regulations regarding polymeric waste.

Environmental Information:

Environmental effects have not been determined.

VII. HEALTH RELATED DATA

Specific Hazard(s): Potential skin, eye & respiratory irritant.

First Aid Procedures: If eye contact occurs, flush with water for 15 minutes, get medical attention. For skin exposure, wipe off excess material, wash skin with rubbing alcohol and than soap and water. If redness or irritation persist, get medical attention. For inhalation move to fresh air, administer oxygen if needed, get medical attention. Wash clothing before reuse. Discard shoes if contaminated inside.

Toxicology Information: The major potential adverse effects of this compound are due to the residual (TDI) which has been shown to cause respiratory irritation and sensitization in certain individuals. TDI is also a severe skin & eye irritant.

Traces of residual TDI will range from approximately 0.02 to 4.0% depending upon polymer.

4.03 Submit a copy or reasonable facsimile of any hazard information (other than an MSDS) that is provided to your customers/users regarding the listed substance or any formulation containing the listed substance. Indicate whether this information has been submitted by circling the appropriate response.

Yes 1

No ..... (2)

4.04 For each activity that uses the listed substance, circle all the applicable number(s) corresponding to each physical state of the listed substance during the activity listed. Physical states for importing and processing activities are determined at the time you import or begin to process the listed substance. Physical states for manufacturing, storage, disposal and transport activities are determined using the final state of the product.

CBI

[ ]

	Physical State				
Activity	Solid	Slurry	Liquid	Liquified Gas	Gas
Manufacture	1	2	3	4	5
Import	1	2	3	4	5
Process	1	2	(3)	4	5
Store	(1)	2	3	4	5
Dispose	1	2	3	4	5
Transport	1	2	3	4	5

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 7 MANUFACTURING AND PROCESSING INFORMATION

General Instructions:

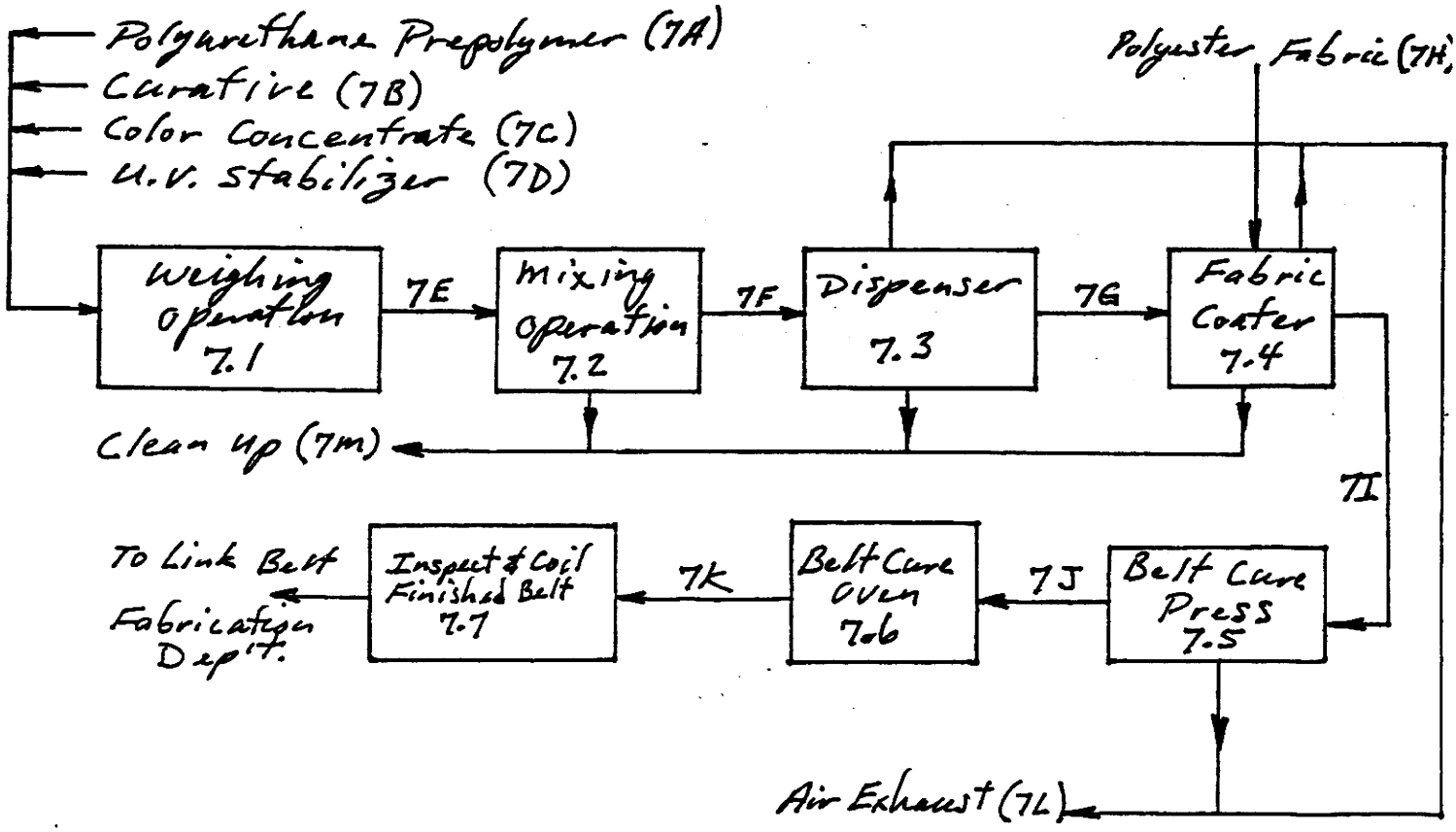
For questions 7.04-7.06, provide a separate response for each process block flow diagram provided in questions 7.01, 7.02, and 7.03. Identify the process type from which the information is extracted.

PART A MANUFACTURING AND PROCESSING PROCESS TYPE DESCRIPTION

7.01 In accordance with the instructions, provide a process block flow diagram showing the major (greatest volume) process type involving the listed substance.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

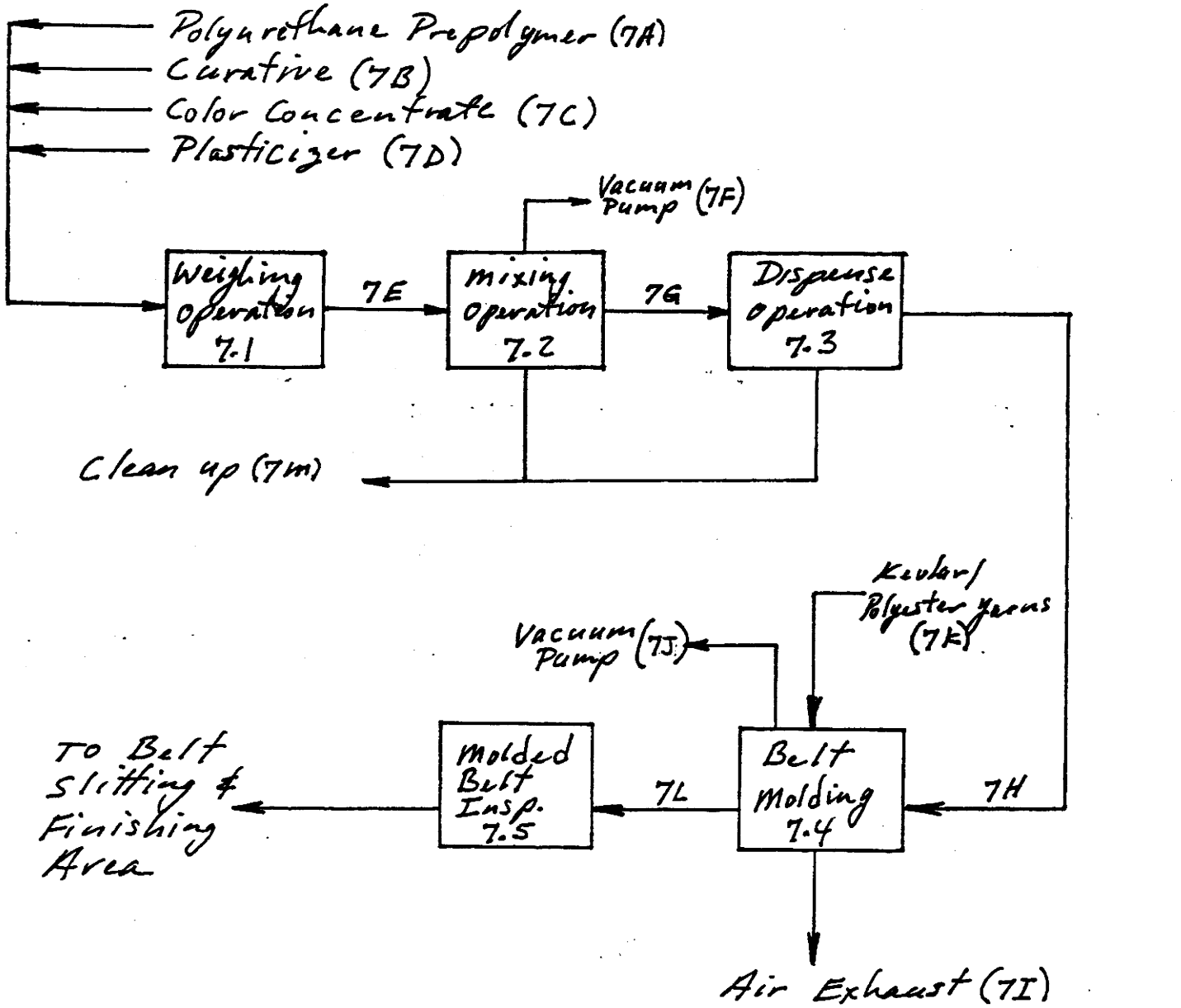


[ ] Mark (X) this box if you attach a continuation sheet.

7.02 In accordance with the instructions, provide a separate process block flow diagram showing each of the three major (greatest volume) process types involving the listed substance.

CBI

[ ] Process type ..... Polyurethane Belt molding Process

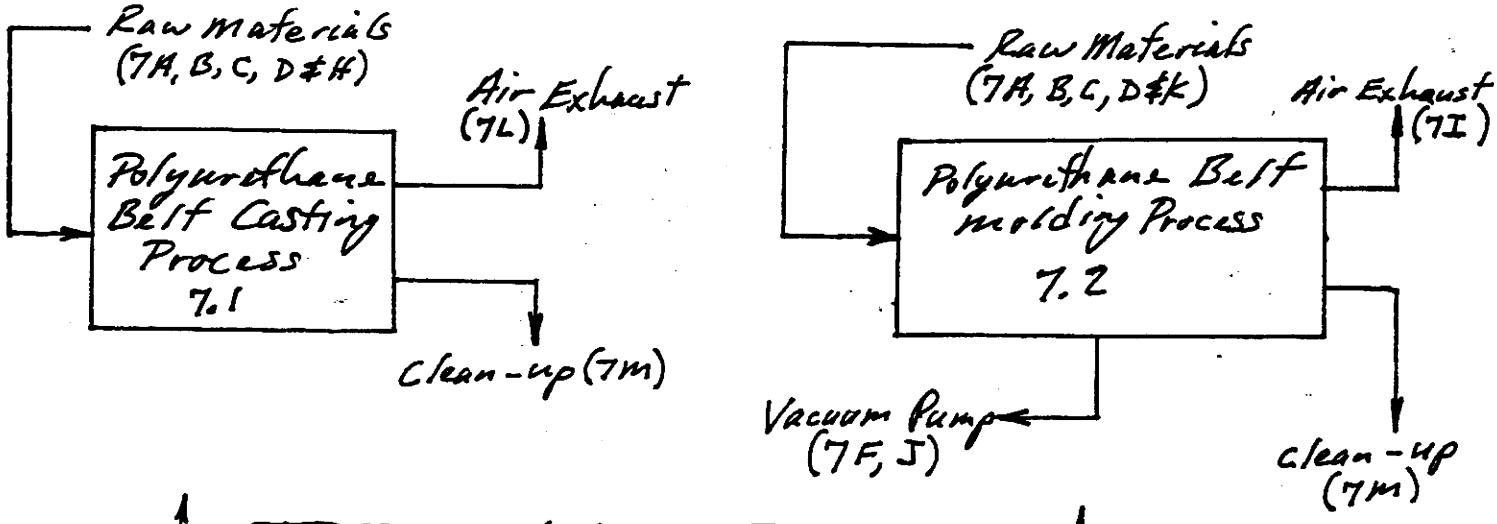


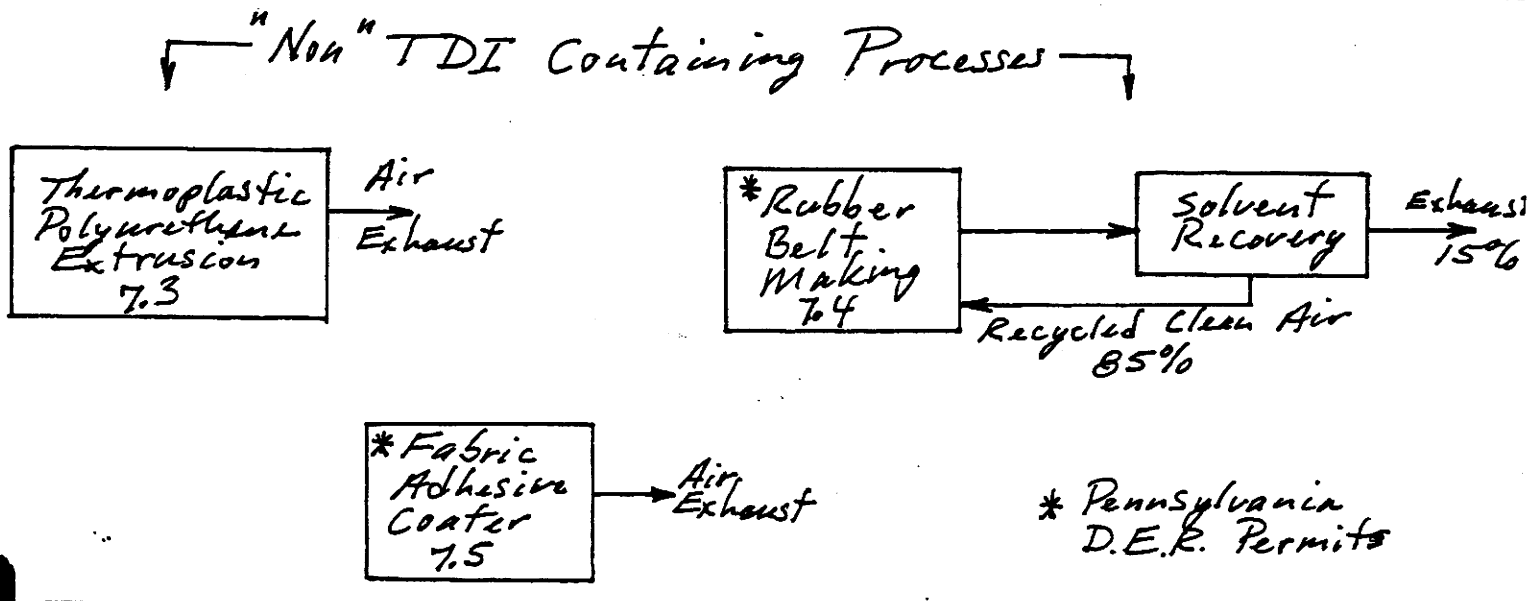
[ ] Mark (X) this box if you attach a continuation sheet.

7.03 In accordance with the instructions, provide a process block flow diagram showing all process emission streams and emission points that contain the listed substance and which, if combined, would total at least 90 percent of all facility emissions if not treated before emission into the environment. If all such emissions are released from one process type, provide a process block flow diagram using the instructions for question 7.01. If all such emissions are released from more than one process type, provide a process block flow diagram showing each process type as a separate block.

CBI

[ ] Process type ..... TDI Containing Processes & Other Plant Processes





[ ] Mark (X) this box if you attach a continuation sheet.

7.04 Describe the typical equipment types for each unit operation identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Unit Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Operating Pressure Range (mm Hg)	Vessel Composition
7.1	Digital Floor Scale	20 to 50	735	—
7.2	Mixer & Tank	50	735	UHMW Tank
7.3	Dispenser Tank	50	735	UHMW Tank
7.4	Fabric Conter	40	735	steel Pan
7.5	Belt Cure "Press"	150	4800	steel Platens
7.6	Belt Cure "Oven"	120	735	Hot Air Oven
7.7	Inspect & Coil Finished Belt	40	735	Wooden Reels

[X] Mark (X) this box if you attach a continuation sheet.

7.04 Describe the typical equipment types for each unit operation identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Unit Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Operating Pressure Range (mm Hg)	Vessel Composition
7.1	Digital Floor Scale	20 to 50	735	—
7.2	Mixer & Tank	50	735	steel Tank
7.3	Dispenser Tank	50	735	Steel Tank
7.4	Belt Injection mold	150	15,000	Steel mold
7.5	Inspection Area	30	735	—

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7E, F, G, I	Polyurethane Mixture	OL	52,000
7H	woven Polyester Fabric	SO	55,000
7J, K	cured Polyurethane Belt	SO	107,000

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7E,G,H	Polyurethane Mixture	OL	15,000
7K	Kevlar/Polyester yarns	SO	1,500
7L	Cured, Molded Belts	SO	16,500

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... Polyurethane Belt Casting Process

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7A	Polyurethane	100%		
7B	methylene dianiline in Sodium chloride Complex	50% (E)(W)	Dioctyl Phthalate	50% (E)(W)
7C & 7D	Additive Package #1			

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... Polyurethane Belt Molding Process

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7A	Polyurethane	100%		
7B	Methylene dianiline in Sodium chloride complex	50% (E)(W)	Dioctyl Phthalate	50% (E)(W)
7C,7D	Additive Package #2			

7.06 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

7.06 (continued)

[1]For each additive package introduced into a process stream, specify the compounds that are present in each additive package, and the concentration of each component. Assign an additive package number to each additive package and list this number in column b. (Refer to the instructions for further explanation and an example. Refer to the glossary for the definition of additive package.)

Additive Package Number	Components of Additive Package		Concentrations (% or ppm)
1	Color Concentrate	(E)(W)	2.5%
	U.V. Stabilizer	(E)(W)	0.4%
2	Color Concentrate	(E)(W)	2-5%
	Plasticizer	(E)(W)	0% to 15% Depending on Product to be made
3			
4			
5			

[2]Use the following codes to designate how the concentration was determined:

A = Analytical result
E = Engineering judgement/calculation

[3]Use the following codes to designate how the concentration was measured:

V = Volume
W = Weight

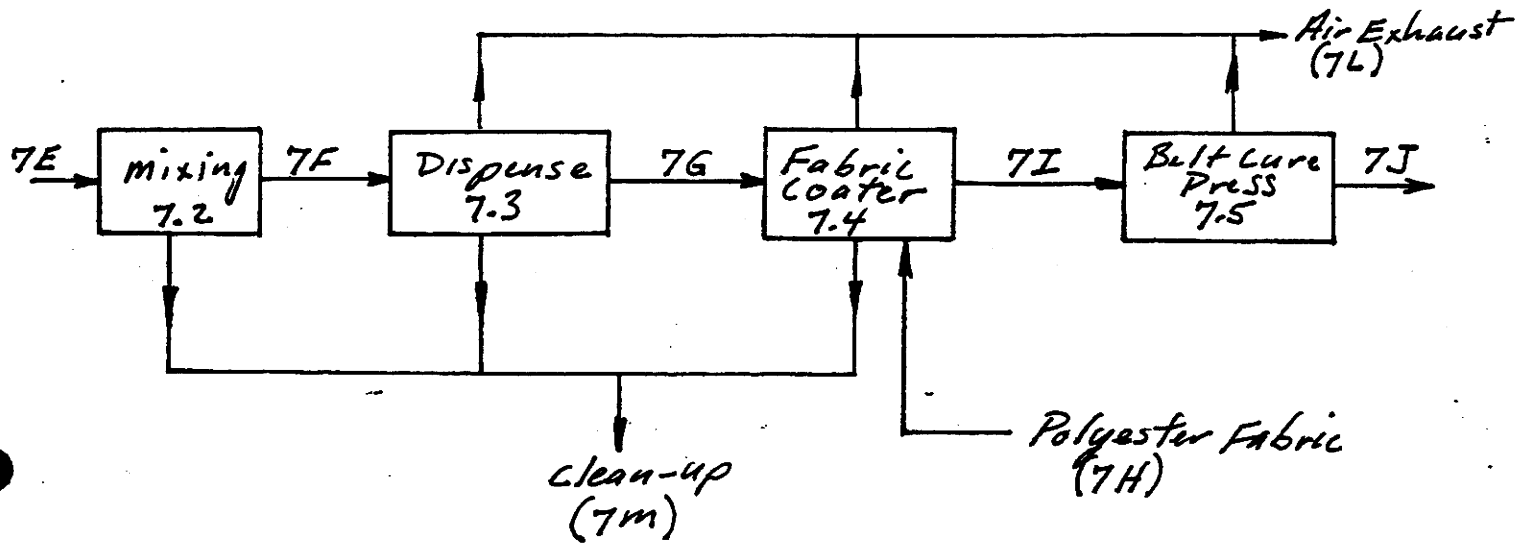
[ ] Mark (X) this box if you attach a continuation sheet.

PART A RESIDUAL TREATMENT PROCESS DESCRIPTION

8.01 In accordance with the instructions, provide a residual treatment block flow diagram which describes the treatment process used for residuals identified in question 7.01.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process



(7L) Exhaust Air 3,000 CFM (E)

(7M) clean-up one time each week for Color changes and week end Shut down.

methylene Chloride is used for clean up, some evaporation to air and some to distillation Unit for recycling.

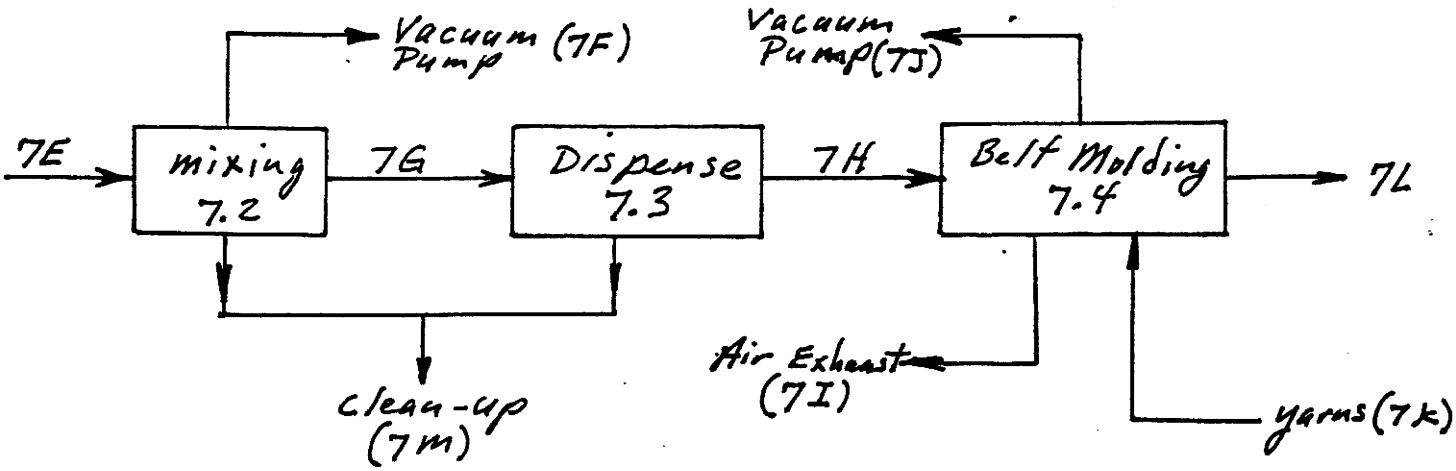
Residual liquid polyurethane is moisture Cured to a Solid.

[ ] Mark (X) this box if you attach a continuation sheet.

8.02 In accordance with the instructions, provide residual treatment block flow diagram(s) which describe each of the treatment processes used for residuals identified in question 7.02.

CBI

[ ] Process type ..... Polyurethane Belt molding Process



(7I) Air Exhaust 4,000 CFM (E)

(7F,J) Vacuum Pump Exhaust. 20 CFM (E)

Pump only emits TDI during injection mold fill, 30 seconds per 15 minutes.

(7m) clean up — Same type clean up as in 8.01 but without the week end shut downs.

The mix and dispense process is a closed system that will not cure up over the week end. Therefore the cleaning is less frequent than in 8.01.

[ ] Mark (X) this box if you attach a continuation sheet.

PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
7L		GU	Air	99.99% (E)(V)	TDI	2.3 PPb (E)(V)
7M		OL	methylene chloride	40% (E)(W)	NA	NA
		OL	Polyurethane	58.5% (E)(W)	TDI	1.5% (E)(V)

8.05 continued below

[X] Mark (X) this box if you attach a continuation sheet.

PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
7I		GU	Air	99.99% (E)(V)	TDI	2.3 PPb (E)(V)
7F,J		GU	Air	38% (E)(W)	TDI	62% (E)(W)
7M		OL	methylene chloride	20% (E)(W)	NA	NA
		OL	Polyurethane	79.75% (E)(W)	TDI	0.25% (E)(W)

8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

8.06 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

a. Stream ID Code	b. Waste Description Code[1]	c. Management Method Code[2]	d. Residual Quantities (kg/yr)	e. Management of Residual (%) On-Site	e. Off-Site	f. Costs for Off-Site Management (per kg)	g. Changes in Management Methods
7L	Air	M5(a)	24,100,000	100			None
7M	B59	M5(a)	1500	100			None
		& 25R	1500	100			None
7M	B69	55	4500	100			

[1]Use the codes provided in Exhibit 8-1 to designate the waste descriptions

[2]Use the codes provided in Exhibit 8-2 to designate the management methods

[X] Mark (X) this box if you attach a continuation sheet.

8.06 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

a. Stream ID Code	b. Waste Description Code[1]	c. Management Method Code[2]	d. Residual Quantities (kg/yr)	e. Management of Residual (%) On-Site	e. Management of Residual (%) Off-Site	f. Costs for Off-Site Management (per kg)	g. Changes in Management Methods
7I	Air	M5 (a)	32,000,000	100			None
7F,I	Air	M5 (a)	27,000	100			None
7M	B59	M5 (a)	500	100			None
		$ 25 R	500	100			NONE
7M	B69	55	1500	100			None

[1] Use the codes provided in Exhibit 8-1 to designate the waste descriptions

[2] Use the codes provided in Exhibit 8-2 to designate the management methods

[ ] Mark (X) this box if you attach a continuation sheet.

PART A EMPLOYMENT AND POTENTIAL EXPOSURE PROFILE

9.01 Mark (X) the appropriate column to indicate whether your company maintains records on the following data elements for hourly and salaried workers. Specify for each data element the year in which you began maintaining records and the number of years the CBI records for that data element are maintained. (Refer to the instructions for further explanation and an example.)

[ ]

Data Element	Data are Maintained for: Hourly Workers	Data are Maintained for: Salaried Workers	Year in Which Data Collection Began	Number of Years Records Are Maintained
Date of hire	X	X	1940	Ind.
Age at hire	X	X	1940	Ind.
Work history of individual before employment at your facility	X	X	1940	Ind.
Sex	X	X	1940	Ind.
Race				
Job titles	X	X	1940	Ind.
Start date for each job title				
End date for each job title				
Work area industrial hygiene monitoring data				
Personal employee monitoring data				
Employee medical history				
Employee smoking history				
Accident history	X	X	1940	Ind.
Retirement date	X	X	1940	Ind.
Termination date	X	X	1940	Ind.
Vital status of retirees				
Cause of death data				

[ ] Mark (X) this box if you attach a continuation sheet.

9.03 Provide a descriptive job title for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance.

CBI

[ ]

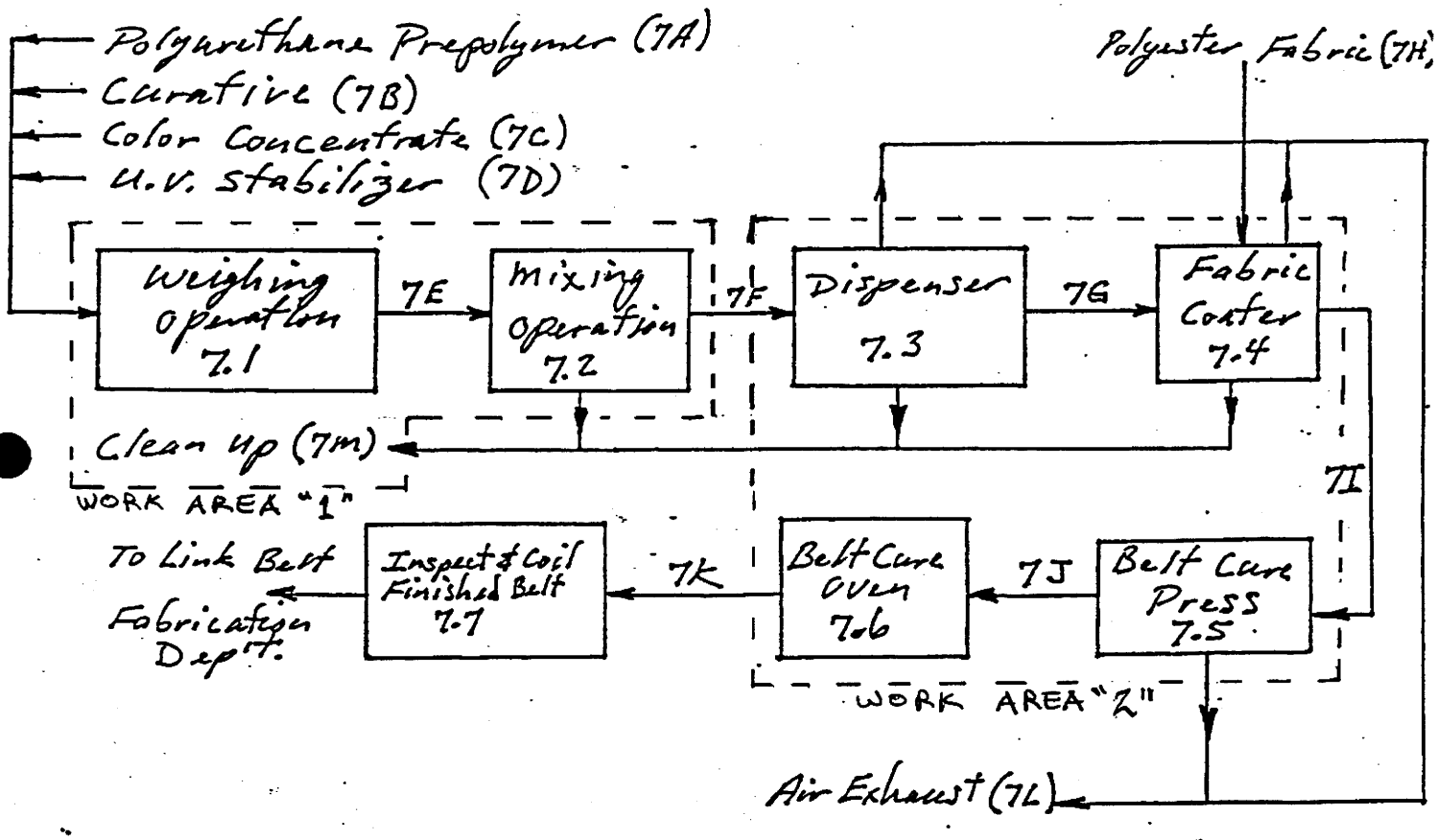
Labor Category	Descriptive Job Title
A	Polyurethane Belt Caster
B	Polyurethane Belt Molder
C	Engineering Technician
D	
E	
F	
G	
H	
I	
J	

[ ] Mark (X) this box if you attach a continuation sheet.

9.04 In accordance with the instructions, provide your process block flow diagram(s) and indicate associated work areas.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

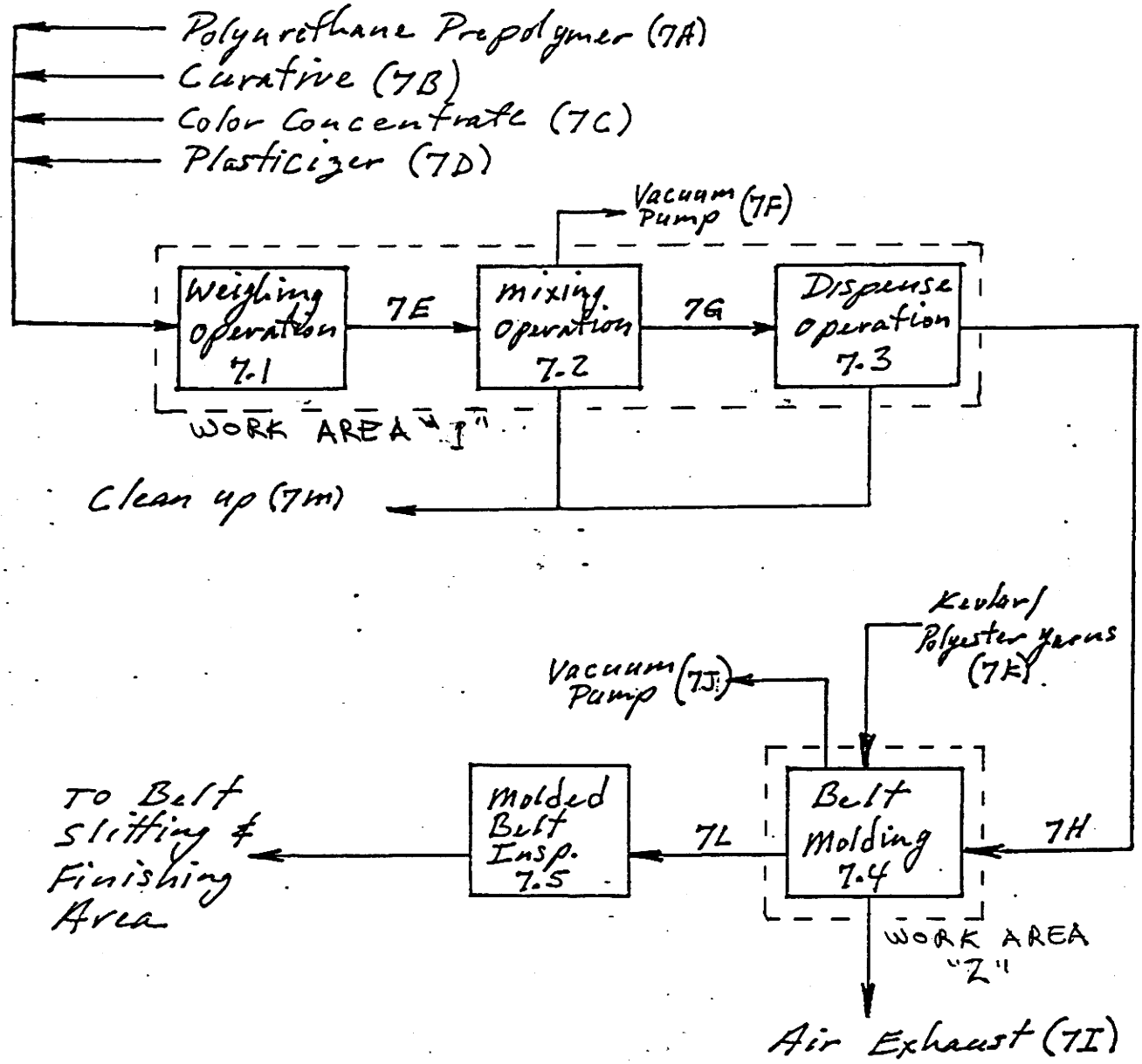


[X] Mark (X) this box if you attach a continuation sheet.

9.04 In accordance with the instructions, provide your process block flow diagram(s) and indicate associated work areas.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process



[ ] Mark (X) this box if you attach a continuation sheet.

9.05 Describe the various work area(s) shown in question 9.04 that encompass workers who may potentially come in contact with or be exposed to the listed substance. Add any additional areas not shown in the process block flow diagram in question 7.01 or 7.02. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Work Area ID	Description of Work Areas and Worker Activities
1	Scale, Mixer - Belt Caster weighs & mixes
2	Casting Machine - Belt caster operates mach.
3	
4	
5	
6	
7	
8	
9	
10	

☒ Mark (X) this box if you attach a continuation sheet.

9.05 Describe the various work area(s) shown in question 9.04 that encompass workers who may potentially come in contact with or be exposed to the listed substance. Add any additional areas not shown in the process block flow diagram in question 7.01 or 7.02. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Work Area ID	Description of Work Areas and Worker Activities
1	Scale, Mixer - Belt Molder weighs & mixes
2	Molding Machinery - Belt Molder operates Mach.
3	
4	
5	
6	
7	
8	
9	
10	

[ ] Mark (X) this box if you attach a continuation sheet.

9.06 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Work area "1" Scale, Mixer .....

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
Belt Caster	2	Direct Skin Contact	OL	C	200
Eng Tech.	2	Direct Skin Contact	OL	B	200

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[X] Mark (X) this box if you attach a continuation sheet.

9.06 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Work area .."2"..... Casting Machine .....

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
Belt caster	2	Direct skin Contact	OL	F	200
Eng. Tech.	2	Direct skin Contact	OL	B	200

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

☒ Mark (X) this box if you attach a continuation sheet.

9.06 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question
CBI and complete it separately for each process type and work area.

[ ] Process type ..... Polyurethane Belt Molding Process

Work area ..... "1" Scale, Mixer .....

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
Belt Molder	2	Direct Skin Contact	OL	C	200
Engr. Tech.	2	Direct Skin Contact	OL	B	200

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

☒ Mark (X) this box if you attach a continuation sheet.

9.06 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Work area ..."2" Molding Machinery...

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
Belt Molder	6	Direct Skin Contact	OL	F	200
Eng. Tech.	2	Direct Skin Contact	OL	B	200

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[ ] Mark (X) this box if you attach a continuation sheet.

9.07 For each labor category represented in question 9.06, indicate the 8-hour Time Weighted Average (TWA) exposure levels and the 15-minute peak exposure levels. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Work area ..... "1" weigh MIX

Labor Category	8-hour TWA Exposure Level (ppm, mg/m^3, other-specify)	15-Minute Peak Exposure Level (ppm, mg/m^3, other-specify)
Belt casters	<.003 PPM	.003 PPM
Eng. Tech.	<.003 PPM	.003 PPM

☒ Mark (X) this box if you attach a continuation sheet.

9.07 For each labor category represented in question 9.06, indicate the 8-hour Time Weighted Average (TWA) exposure levels and the 15-minute peak exposure levels. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Work area ..... "2" Casting Machine

Labor Category	8-hour TWA Exposure Level (ppm, mg/m^3, other-specify)	15-Minute Peak Exposure Level (ppm, mg/m^3, other-specify)
Belt casters	<.003 PPM	.003 PPM
Finish.	<.003 PPM	.003 PPM

[X] Mark (X) this box if you attach a continuation sheet.

9.07 For each labor category represented in question 9.06, indicate the 8-hour Time Weighted Average (TWA) exposure levels and the 15-minute peak exposure levels. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Work area ..... "1" Weigh Mix .....

Labor Category	8-hour TWA Exposure Level (ppm, mg/m^3, other-specify)	15-Minute Peak Exposure Level (ppm, mg/m^3, other-specify)
Belt Molder	<.003 PPM	.003 PPM
Engr Tech.	<.003 PPM	.003 PPM

[X] Mark (X) this box if you attach a continuation sheet.

9.07 For each labor category represented in question 9.06, indicate the 8-hour Time Weighted Average (TWA) exposure levels and the 15-minute peak exposure levels. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Work area ..... "2" Molding Machinery

Labor Category	8-hour TWA Exposure Level (ppm, mg/m^3, other-specify)	15-Minute Peak Exposure Level (ppm, mg/m^3, other-specify)
Belt caster	<.001 PPM	.003 PPM
Eng. Tech.	<.001 PPM	.003 PPM

[ ] Mark (X) this box if you attach a continuation sheet.

PART B WORK PLACE MONITORING PROGRAM

9.08 If you monitor worker exposure to the listed substance, complete the following table.

CBI

[ ]

Sample/Test	Work Area ID	Testing Frequency (per year)	Number of Samples (per test)	Who Samples[1]	Analyzed In-House (Y/N)	Number of Years Records Maintained
Personal breathing zone	7.4 (7.01 & 7.02)	4	1	D	Y	7
General work area (air)						
Wipe samples						
Adhesive patches						
Blood samples						
Urine samples						
Respiratory samples						
Allergy tests						
Other (specify)						
Other (specify)						
Other (specify)						

[1]Use the following codes to designate who takes the monitoring samples:

A = Plant industrial hygienist
B = Insurance carrier
C = OSHA consultant
D = Other (specify) Eng. Tech.

[ ] Mark (X) this box if you attach a continuation sheet.

9.09 For each sample type identified in question 9.08, describe the type of sampling and analytical methodology used for each type of sample.

CBI

[ ]	Sample Type	Sampling and Analytical Methodology
	Passive Dosimeter	Random Sampling — Color match for exposure level

9.10 If you conduct personal and/or ambient air monitoring for the listed substance, specify the following information for each equipment type used.

CBI

[ ]	Equipment Type[1]	Detection Limit[2]	Manufacturer	Averaging Time (hr)	Model Number
	A	PPB	GMD Systems	10	Series 550

[1]Use the following codes to designate personal air monitoring equipment types:

A = Passive dosimeter
B = Detector tube
C = Charcoal filtration tube with pump
D = Other (specify) _____

Use the following codes to designate ambient air monitoring equipment types:

E = Stationary monitors located within work area
F = Stationary monitors located within facility
G = Stationary monitors located at plant boundary
H = Mobile monitoring equipment (specify) _____
I = Other (specify) _____

[2]Use the following codes to designate detection limit units:

A = ppm
B = Fibers/cubic centimeter (f/cc)
C = Micrograms/cubic meter (μ/m^3)

[ ] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Work area ..... "1" Weigh Mix .....

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust				
General dilution	Y	—		
Other (specify)				
Vessel emission controls				
Mechanical loading or packaging equipment				
Other (specify)				

[X] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Work area ..... "2" Casting Machine .....

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	—	Y	1988
General dilution	Y	—		
Other (specify)				
Vessel emission controls				
Mechanical loading or packaging equipment				
Other (specify)				

☒ Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Work area ..... "1" Weigh, Mix .....

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust				
General dilution	Y	—		
Other (specify)				
Vessel emission controls				
Mechanical loading or packaging equipment				
Other (specify)				

[X] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Work area ..... #2 Molding Machines .....

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	1985	Y	1988
General dilution	Y	—		
Other (specify)				
Vessel emission controls				
Mechanical loading or packaging equipment				
Other (specify)				

[ ] Mark (X) this box if you attach a continuation sheet.

9.13 Describe all equipment or process modifications you have made within the 3 years prior to the reporting year that have resulted in a reduction of worker exposure to the listed substance. For each equipment or process modification described, state the percentage reduction in exposure that resulted. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Work area ..... "1" Weigh, Mix .....

Equipment or Process Modification	Reduction in Worker Exposure Per Year (%)
Larger Batch mixing in closed container	50

[X] Mark (X) this box if you attach a continuation sheet.

9.13 Describe all equipment or process modifications you have made within the 3 years prior to the reporting year that have resulted in a reduction of worker exposure to the listed substance. For each equipment or process modification described, state the percentage reduction in exposure that resulted. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Work area ..... "2" Molding Machine .....

Equipment or Process Modification	Reduction in Worker Exposure Per Year (%)
Automated injection Process	15

[ ] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Work area ..... "1" Weigh, Mix .....

Equipment Types	Wear or Use (Y/N)
Respirators	
Safety goggles/glasses	Y
Face shields	Y
Coveralls	
Bib aprons	Y
Chemical-resistant gloves	Y
Other (specify)	
Chemical-resist. Shoes	Y

[X] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Casting Machine

Work area ..... "2" Casting Machine .....

Equipment Types	Wear or Use (Y/N)
Respirators	
Safety goggles/glasses	Y
Face shields	
Coveralls	
Bib aprons	
Chemical-resistant gloves	
Other (specify)	

[X] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Work area ..... "I" Weigh & MIX

Equipment Types	Wear or Use (Y/N)
Respirators	
Safety goggles/glasses	Y
Face shields	Y
Coveralls	
Bib aprons	Y
Chemical-resistant gloves	Y
Other (specify)	
Chemical resist. Shoes	Y

[X] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Work area ..... "2" Molding Machinery .....

Equipment Types	Wear or Use (Y/N)
Respirators	
Safety goggles/glasses	Y
Face shields	
Coveralls	
Bib aprons	
Chemical-resistant gloves	
Other (specify)	

[ ] Mark (X) this box if you attach a continuation sheet.

PART E WORK PRACTICES

9.19 Describe all of the work practices and administrative controls used to reduce or eliminate worker exposure to the listed substance (e.g., restrict entrance only to authorized workers, mark areas with warning signs, insure worker detection and monitoring practices, provide worker training programs, etc.). Photocopy this
CBI question and complete it separately for each process type and work area.

[ ]

Process type ..... Polyurethane Belt Casting Process

Work area ..... "1" Weigh, Mix

Restrict entrance to authorized personnel

Signs - No eating or drinking

9.20 Indicate (X) how often you perform each housekeeping task used to clean up routine leaks or spills of the listed substance. Photocopy this question and complete it separately for each process type and work area.

Process type ..... Polyurethane Belt Casting Process

Work area ..... "1" Weigh, Mix

Housekeeping Tasks	Less Than Once Per Day	1-2 Times Per Day	3-4 Times Per Day	More Than 4 Times Per Day
Sweeping	X			
Vacuuming				
Water flushing of floors				
Other (specify)				

[X] Mark (X) this box if you attach a continuation sheet.

PART E WORK PRACTICES

9.19 Describe all of the work practices and administrative controls used to reduce or eliminate worker exposure to the listed substance (e.g., restrict entrance only to authorized workers, mark areas with warning signs, insure worker detection and monitoring practices, provide worker training programs, etc.). Photocopy this
CBI question and complete it separately for each process type and work area.

[ ] Process type ..... Polyurethane Belt Casting Process

Work area ..... "2" Casting Machine .....

Signs - No eating or drinking

9.20 Indicate (X) how often you perform each housekeeping task used to clean up routine leaks or spills of the listed substance. Photocopy this question and complete it separately for each process type and work area.

Process type ..... Polyurethane Belt Casting Process

Work area ..... "2" Casting Machine .....

Housekeeping Tasks	Less Than Once Per Day	1-2 Times Per Day	3-4 Times Per Day	More Than 4 Times Per Day
Sweeping	X			
Vacuuming				
Water flushing of floors				
Other (specify)				

[X] Mark (X) this box if you attach a continuation sheet.

PART E WORK PRACTICES

9.19 Describe all of the work practices and administrative controls used to reduce or eliminate worker exposure to the listed substance (e.g., restrict entrance only to authorized workers, mark areas with warning signs, insure worker detection and monitoring practices, provide worker training programs, etc.). Photocopy this CBI question and complete it separately for each process type and work area.

[ ]

Process type ..... Polyurethane Belt Molding Process

Work area ..... "1" Weigh, Mix

Restrict entrance to authorized personnel

Signs - No eating or drinking

9.20 Indicate (X) how often you perform each housekeeping task used to clean up routine leaks or spills of the listed substance. Photocopy this question and complete it separately for each process type and work area.

Process type ..... Polyurethane Belt Molding Process

Work area ..... "1" Weigh, Mix

Housekeeping Tasks	Less Than Once Per Day	1-2 Times Per Day	3-4 Times Per Day	More Than 4 Times Per Day
Sweeping	X			
Vacuuming				
Water flushing of floors				
Other (specify)				

☒ Mark (X) this box if you attach a continuation sheet.

PART E WORK PRACTICES

9.19 Describe all of the work practices and administrative controls used to reduce or eliminate worker exposure to the listed substance (e.g., restrict entrance only to authorized workers, mark areas with warning signs, insure worker detection and monitoring practices, provide worker training programs, etc.). Photocopy this
CBI question and complete it separately for each process type and work area.

[ ]

Process type ..... Polyurethane Belt Molding Process

Work area ..... "2" Molding Machinery

Signs - No eating or drinking

9.20 Indicate (X) how often you perform each housekeeping task used to clean up routine leaks or spills of the listed substance. Photocopy this question and complete it separately for each process type and work area.

Process type ..... Polyurethane Belt Molding Process

Work area ..... "2" Molding Machinery

Housekeeping Tasks	Less Than Once Per Day	1-2 Times Per Day	3-4 Times Per Day	More Than 4 Times Per Day
Sweeping	X			
Vacuuming				
Water flushing of floors				
Other (specify)				

[ ] Mark (X) this box if you attach a continuation sheet.

9.21 Do you have a written medical action plan for responding to routine or emergency exposure to the listed substance?

Routine exposure

Yes 1

No 2

Emergency exposure

Yes 1

No 2

N/A

If yes, where are copies of the plan maintained?

Routine exposure: _____

Emergency exposure: _____

9.22 Do you have a written leak and spill cleanup plan that addresses the listed substance? Circle the appropriate response.

Yes 1

No ..... (2)

If yes, where are copies of the plan maintained? _____

Has this plan been coordinated with state or local government response organizations? Circle the appropriate response.

Yes 1

No 2

9.23 Who is responsible for monitoring worker safety at your facility? Circle the appropriate response.

Plant safety specialist 1

Insurance carrier 2

OSHA consultant 3

Other (specify) _____ 4

N/A

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 10 ENVIRONMENTAL RELEASE

General Instructions:

Complete Part E (questions 10.23-10.35) for each non-routine release involving the listed substance that occurred during the reporting year. Report on all releases that are equal to or greater than the listed substance's reportable quantity value, RQ, unless the release is federally permitted as defined in 42 U.S.C. 9601, or is specifically excluded under the definition of release as defined in 40 CFR 302.3(22). Reportable quantities are codified in 40 CFR Part 302. If the listed substance is not a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and, thus, does not have an RQ, then report releases that exceed 2,270 kg. If such a substance however, is designated as a CERCLA hazardous substance, then report those releases that are equal to or greater than the RQ. The facility may have answered these questions or similar questions under the Agency's Accidental Release Information Program and may already have this information readily available. Assign a number to each release and use this number throughout this part to identify the release. Releases over more than a 24-hour period are not single releases, i.e., the release of a chemical substance equal to or greater than an RQ must be reported as a separate release for each 24-hour period the release exceeds the RQ.

For questions 10.25-10.35, answer the questions for each release identified in question 10.23. Photocopy these questions and complete them separately for each release.

PART A GENERAL INFORMATION

10.01 Where is your facility located? Circle all appropriate responses.

CBI

[ ] Industrial area ..... (1)

Urban area 2

Residential area 3

Agricultural area 4

Rural area 5

Adjacent to a park or a recreational area 6

Within 1 mile of a navigable waterway 7

Within 1 mile of a school, university, hospital, or nursing home facility ..... (8)

Within 1 mile of a non-navigable waterway ..... (9)

Other (specify) _____ 10

[ ] Mark (X) this box if you attach a continuation sheet.

10.02 Specify the exact location of your facility (from central point where process unit is located) in terms of latitude and longitude or Universal Transverse Mercader (UTM) coordinates.

Latitude ..... 40 ° 9 ' 30 "

Longitude ..... 76 ° 24 ' 0 "

UTM coordinates ..... Zone _____, Northing _____, Easting _____

10.03 If you monitor meteorological conditions in the vicinity of your facility, provide the following information.

Average annual precipitation ..... 50 inches/year

Predominant wind direction ..... W

10.04 Indicate the depth to groundwater below your facility.

Depth to groundwater ..... 15 meters

10.05 For each on-site activity listed, indicate (Y/N/NA) all routine releases of the listed substance to the environment. (Refer to the instructions for a definition of Y, N, and NA.)

CBI	On-Site Activity	Environmental Release Air	Water	Land
[ ]	Manufacturing			
	Importing			
	Processing	Y		
	Otherwise used			
	Product or residual storage			
	Disposal			
	Transport			

[ ] Mark (X) this box if you attach a continuation sheet.

10.06 Provide the following information for the listed substance and specify the level of precision for each item. (Refer to the instructions for further explanation and an example.)

CBI

[ ]

Quantity discharged to the air	300	kg/yr ± 15 % E
Quantity discharged in wastewaters		kg/yr ± ___ %
Quantity managed as other waste in on-site treatment, storage, or disposal units		kg/yr ± ___ %
Quantity managed as other waste in off-site treatment, storage, or disposal units		kg/yr ± ___ %

E = Engineering Estimate

[ ] Mark (X) this box if you attach a continuation sheet.

10.08 Describe the control technologies used to minimize release of the listed substance for each process stream containing the listed substance as identified in your process block or residual treatment block flow diagram(s). Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Polyurethane Belt Casting Process

Stream ID Code	Control Technology	Percent Efficiency

Release TDI to atmosphere

[X] Mark (X) this box if you attach a continuation sheet.

10.08 Describe the control technologies used to minimize release of the listed substance for each process stream containing the listed substance as identified in your process block or residual treatment block flow diagram(s). Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Stream ID Code	Control Technology	Percent Efficiency

Release TDI to atmosphere

[ ] Mark (X) this box if you attach a continuation sheet.

PART B RELEASE TO AIR

10.09 Point Source Emissions -- Identify each emission point source containing the listed substance in terms of a Stream ID Code as identified in your process block or residual treatment block flow diagram(s), and provide a description of each point source. Do not include raw material and product storage vents, or fugitive emission sources (e.g., equipment leaks). Photocopy this question and complete it separately for each process type.

CBI
[ ]

Process type ..... Polyurethane Belt Casting Process

Point Source ID Code	Description of Emission Point Source
7.1	Weighing
7.2	Mixing
7.3	Dispenser
7.4	Fabric Coater
7.5	Belt Cure Press

[X] Mark (X) this box if you attach a continuation sheet.

PART B RELEASE TO AIR

10.09 Point Source Emissions -- Identify each emission point source containing the listed substance in terms of a Stream ID Code as identified in your process block or residual treatment block flow diagram(s), and provide a description of each point source. Do not include raw material and product storage vents, or fugitive emission sources (e.g., equipment leaks). Photocopy this question and complete it separately for each process type.

CBI
[ ]

Process type ..... Polyurethane Belt Molding Process

Point Source ID Code	Description of Emission Point Source
7.1	Weighing
7.2	Mixing
7.3	Dispense
7.4	Belt Molding

[ ] Mark (X) this box if you attach a continuation sheet.

[ ] Mark (X) this box if you attach a continuation sheet.

10.10 Emission Characteristics - - Characterize the emissions for each Point Source ID Code identified in question 10.09 by completing the following table.

CBI

[ ]

Point Source ID Code	Physical State[1]	Average Emissions (kg/day)	Frequency[2] (days/yr)	Duration[3] (min/day)	Average Emission Factor[4]	Maximum Emission Rate (kg/min)	Maximum Emission Rate Frequency (events/yr)	Maximum Emission Rate Duration (min/event)
7.01 7.1	V	.05	200	60	.01	.015	1500	10
7.01 7.2	V	.225	200	600	.01	.0008	1500	100
7.01 7.3	V	.225	200	600	.01	.0008	1500	100
7.01 7.4	V	.225	200	600	.01	.0008	1500	100
7.01 7.5	V	.225	200	600	.01	.0008	1500	100
7.02 7.1	V	.05	200	30	.01	.003	400	10
7.02 7.2	V	.225	200	300	.01	.0016	400	100
7.02 7.3	V	.05	200	30	.01	.003	400	10
7.02 7.4	V	.225	200	400	.01	.001	400	1

[1]Use the following codes to designate physical state at the point of release:
G = Gas; V = Vapor; P = Particulate; A = Aerosol; O = Other (specify) _____

[2]Frequency of emission at any level of emission

[3]Duration of emission at any level of emission

[4]Average Emission Factor — Provide estimated (± 25 percent) emission factor (kg of emission per kg of production of listed substance)

PART C FUGITIVE EMISSIONS

10.13 Equipment Leaks -- Complete the following table by providing the number of equipment types listed which are exposed to the listed substance and which are in service according to the specified weight percent of the listed substance passing through the component. Do this for each process type identified in your process block or residual treatment block flow diagram(s). Do not include equipment types that are not exposed to the listed substance. If this is a batch or intermittently operated process, give an overall percentage of time per year that the process type is exposed to the listed substance. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Poly urethane Belt Casting Process

Percentage of time per year that the listed substance is exposed to this process type ..... 45 %

Equipment Type	Number of Components in Service by Weight Percent of Listed Substance in Process Stream					
	Less than 5%	5-10%	11-25%	26-75%	76-99%	Greater than 99%
Pump seals[1]						
Packed					1	
Mechanical					1	
Double mechanical[2]						
Compressor seals[1]						
Flanges						
Valves						
Gas[3]						
Liquid					1	
Pressure relief devices[4] (Gas or vapor only)						
Sample connections						
Gas						
Liquid						
Open-ended lines[5] (e.g., purge, vent)						
Gas						
Liquid					1	

[1] List the number of pump and compressor seals, rather than the number of pumps or compressors

10.13 continued on next page

[X] Mark (X) this box if you attach a continuation sheet.

10.13 (continued)

[2]If double mechanical seals are operated with the barrier (B) fluid at a pressure greater than the pump stuffing box pressure and/or equipped with a sensor (S) that will detect failure of the seal system, the barrier fluid system, or both, indicate with a "B" and/or an "S", respectively

[3]Conditions existing in the valve during normal operation

[4]Report all pressure relief devices in service, including those equipped with control devices

[5]Lines closed during normal operation that would be used during maintenance operations

10.14 Pressure Relief Devices with Controls -- Complete the following table for those pressure relief devices identified in 10.13 to indicate which pressure relief devices in service are controlled. If a pressure relief device is not controlled, enter "None" under column c.

CBI

[ ]

a. Number of Pressure Relief Devices	b. Percent Chemical in Vessel[1]	c. Control Device	d. Estimated Control Efficiency[2]
		None	

[1]Refer to the table in question 10.13 and record the percent range given under the heading entitled "Number of Components in Service by Weight Percent of Listed Substance" (e.g., <5%, 5-10%, 11-25%, etc.)

[2]The EPA assigns a control efficiency of 100 percent for equipment leaks controlled with rupture discs under normal operating conditions. The EPA assigns a control efficiency of 98 percent for emissions routed to a flare under normal operating conditions

[ ] Mark (X) this box if you attach a continuation sheet.

PART C FUGITIVE EMISSIONS

10.13 Equipment Leaks -- Complete the following table by providing the number of equipment types listed which are exposed to the listed substance and which are in service according to the specified weight percent of the listed substance passing through the component. Do this for each process type identified in your process block or residual treatment block flow diagram(s). Do not include equipment types that are not exposed to the listed substance. If this is a batch or intermittently operated process, give an overall percentage of time per year that the process type is exposed to the listed substance. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Polyurethane Belt Molding Process

Percentage of time per year that the listed substance is exposed to this process type ..... 95 %

Equipment Type	Number of Components in Service by Weight Percent of Listed Substance in Process Stream					
	Less than 5%	5-10%	11-25%	26-75%	76-99%	Greater than 99%
Pump seals[1]						
Packed						
Mechanical			20			
Double mechanical[2]						
Compressor seals[1]					2	
Flanges						
Valves						
Gas[3]						
Liquid			10			
Pressure relief devices[4] (Gas or vapor only)			5			
Sample connections						
Gas						
Liquid						
Open-ended lines[5] (e.g., purge, vent)						
Gas						
Liquid			5			

[1]List the number of pump and compressor seals, rather than the number of pumps or compressors

10.13 continued on next page

[ ] Mark (X) this box if you attach a continuation sheet.

10.13 (continued)

[2]If double mechanical seals are operated with the barrier (B) fluid at a pressure greater than the pump stuffing box pressure and/or equipped with a sensor (S) that will detect failure of the seal system, the barrier fluid system, or both, indicate with a "B" and/or an "S", respectively

[3]Conditions existing in the valve during normal operation

[4]Report all pressure relief devices in service, including those equipped with control devices

[5]Lines closed during normal operation that would be used during maintenance operations

---

10.14 Pressure Relief Devices with Controls -- Complete the following table for those pressure relief devices identified in 10.13 to indicate which pressure relief devices in service are controlled. If a pressure relief device is not controlled, enter "None" under column c.

CBI

[ ]

a. Number of Pressure Relief Devices	b. Percent Chemical in Vessel[1]	c. Control Device	d. Estimated Control Efficiency[2]
		None	

[1]Refer to the table in question 10.13 and record the percent range given under the heading entitled "Number of Components in Service by Weight Percent of Listed Substance" (e.g., <5%, 5-10%, 11-25%, etc.)

[2]The EPA assigns a control efficiency of 100 percent for equipment leaks controlled with rupture discs under normal operating conditions. The EPA assigns a control efficiency of 98 percent for emissions routed to a flare under normal operating conditions

---

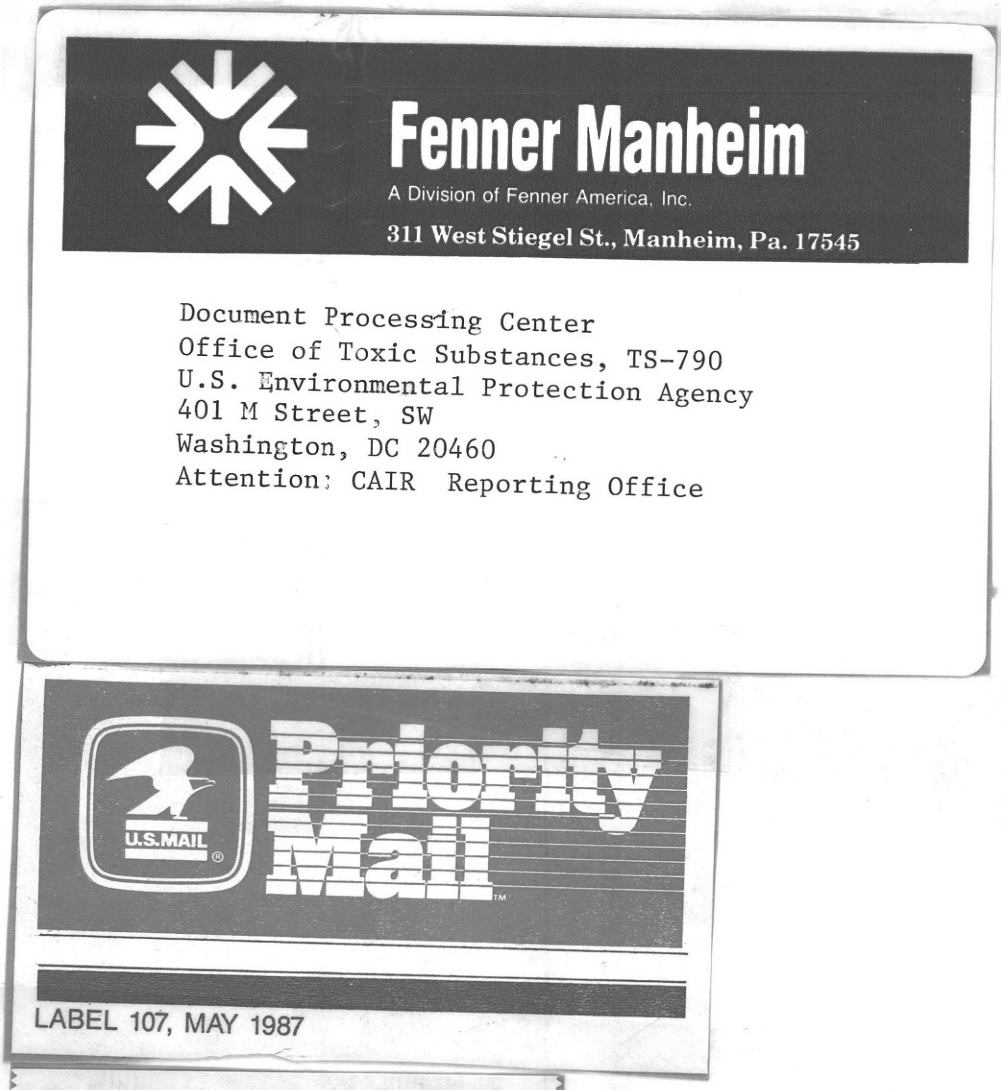
[ ] Mark (X) this box if you attach a continuation sheet.

I certify that I have personally examined and am familiar with the information submitted in this CBI Substantiation Form and all attached documents. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

A. Ronald Hetrick	A. Ronald Hetrick	6-30-89
NAME	SIGNATURE	DATE SIGNED

V.P. Development	(717) 665 - 2421
TITLE	TELEPHONE NO.

[ ] Mark (X) this box if you attach a continuation sheet.



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